Date: Sat, 12 Feb 94 04:30:08 PST
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #30
To: Ham-Ant

Ham-Ant Digest Sat, 12 Feb 94 Volume 94 : Issue 30

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 8 Feb 1994 01:40:57 GMT
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!
sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!news1.boi.hp.com!hp-pcd!hpcvsnz!
tomb@network.ucsd.edu
Subject: 75 ohm twinlead
To: ham-ant@ucsd.edu

Claude Frantz (claude@bauv.unibw-muenchen.de) wrote:

: Amphenol number 214-023: 75 ohm oval type twin-lead transmission
: line capable of handling 1 kW of RF power in amateur applications.

: Conductors: 7 AWG-21 copper.

With no loss in the insulation and assuming smooth conductors with
the same cross-section, the loss at 14MHz would be expected to be
about 0.58dB/100ft. However, expect about 10% higher loss because
of the stranded wire, and possibly higher loss if the line is wet.
This is a bit better than RG-213, but not as good as 9913.

: There is a low power type too: Amphenol number 214-080, 7 AWG-28
: tinned copper. No information about power rating.

Same assumptions about the wire lead to about 1.3dB/100 feet for
this stuff.

In both cases, the attenuation scales directly as the square root of
frequency. If you multiply the frequency by 2, multiply the
attenuation _in_dB_ by 1.41.

Conclusion: you don't do this to get low loss. (Most loss in lines
at HF is I^2 * R. To get the loss down, lower the effective R by
making the conductors larger, or lower the I by making the impedance
higher. That's how high impedance open line gets low loss: the same
R at 600 ohms dissipates lots less than at 50 ohms.)

73, K7ITM

Date: 8 Feb 94 00:20:02 GMT
From: netcon!bongo!skyld!jangus@locus.ucla.edu
Subject: Antenna Erection Aids
To: ham-ant@ucsd.edu

In article <1994Feb6.144242.14808@bongo.tele.com> julian@bongo.tele.com writes:

> For those appliance operators that would like the catapult
> and reel option but lack the motivation or skills to attach a $10.00
> reel to a $10.00 catapult with $00.02 of duct tape there is a
> solution.
>

Why, in my day, we used to have to raise our own cats and ducks. Finding
the pults was a tad tricky, but could be done with the skillful adaptation
of a snipe bag.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-

 US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
   Phone: 1 (310) 324-6080 | badly run corporation."

Date: 10 Feb 94 15:15:00 -0500
From: blkcat!1-109-239-0!Scott.Snyder@uunet.uu.net
Subject: Antenna for Sale
To: ham-ant@ucsd.edu

Alpha 60' sloper antenna and 75' of coax cable for sale. Best offer. If
interested, leave me a message with offer and phone number. I'll call
back. (703) 816-7823.

Date: Thu, 10 Feb 1994 15:41:06 GMT
From: spsgate!mogate!newsgate!dtsdev0!kinzer@uunet.uu.net
Subject: BALUN FOR 2-M YAGI
To: ham-ant@ucsd.edu

(Hugh Shane N7UAX) writes:
+Can anyone suggest a design for matching a 50-ohm coax feed to a six beam,
+2 meter Yagi. The balun designs I've seen all seem to be restricted to
+frequencies less than 100MHz. There must be a classic technique, I just
+can't find it!

Gamma Match?

-dave

Date: 10 Feb 1994 16:36:16 GMT
From: src.dec.com!src.dec.com!estrella@decwrl.dec.com
Subject: Cushcraft R7 antenna to trade...
To: ham-ant@ucsd.edu

****

Posting for my brother who doesn't have an account...

I have a cushcraft R7 vertical antenna I want to trade for
a good working HF solid state transceiver; I can make up
some cash with the antenna if necesary.

I can be reached at (408) 279-6028 evenings and weekends.

Luis Estrella
KD6VTZ TRADE ONLY

****
Or you can send me e-mail and I will give Luis your message.

John Estrella

Date: Tue, 8 Feb 1994 14:23:56 GMT
From: agate!howland.reston.ans.net!vixen.cso.uiuc.edu!uchinews!
dionheinz.uchicago.edu!sweeney@network.ucsd.edu
Subject: How to increase antenna sensitivity?
To: ham-ant@ucsd.edu

For AM broadcast, receiver attennas are usually wirewound ferrite
cores. Could someone explain to me how these work or give me a pointer
to a reference? I know they are directional and I think they somehow
couple with the magnetic field of the broadcast signal. How are they
designed? How are they built? How are they tuned? Would tuning to a
single station help reception?

In article <1994Feb7.041619.3604@cmkrnl> you write:
>In article <2j4n1i$gje@blaze.cs.jhu.edu>, Michael Young Ko writes:
>> Does anyone know how those AM Radio Signal amplifiers work?
>> I remember seeing one a couple of years back and it was this large
>> cylinder about 6" thick. Any ideas?
>
>Most of them aren't "amplifiers", they're just antennas that are much bigger
>than the ones built into most portables. Which isn't to say that they don't
>work -- they do. Very well.
>
>The general answer to "how to make an antenna more sensitive" is:
>
>   - Make it bigger. (But still resonant at the freq of interest, if
>   possible.)
>
>   - Get it up higher. (But not so high that the losses in the lead
>   wire cancels the gains from increased height.)
>
>   --- Jamie Hanrahan, Kernel Mode Systems, San Diego CA
>Internet: jeh@cmkrnl.com (JH645) Uucp: uunet!cmkrnl!jeh CIS: 74140,2055
--

Jeff sweeney@dionheinz.uchicago.edu

Date: Tue, 8 Feb 1994 01:09:22 GMT
From: spsgate!mogate!newsgate!nuntius@uunet.uu.net
Subject: J-Pole Design Needed
To: ham-ant@ucsd.edu

In article <2irlta$9o3@gaia.ucs.orst.edu> Ray Stein, steinr@ucs.orst.edu writes:
>Though it is not made only of just coax, I highly recommend using
>a twin-lead TV antenna J-Pole design. I will describe briefly how
>it is made:
>
>Starting at the bottom, short the two leads together. Cut a section of
>about 55 inches total for the antenna. From the short up to 1.25 inches,
>connect your standard 50 ohm coax. On one side only up 16.5 inches from
>short, cut a .25 inch chunck out. It's done!
>
>Trim the top for desired SWR. Good luck!
>
>--Ray Stein

Has anyone tried this type of J pole as a dual band antenna. I have a "copper cactus" and it works well on both 2mtr and 70 cm......I am looking for a good dual band antenna for my suzuki sidekick. The problem is the lack of a good ground plane. Another design point is I would like it to fit through the garage door. I can mount it fairly low towards the bumper if required.

Thanks for the help.

Rick Aldom

Date: 11 Feb 94 17:01:29 GMT
From: news.tek.com!gvgpsa.gvg.tek.com!gold.gvg.tek.com!gvgadg.gvg.tek.com!groverc@uunet.uu.net
Subject: Need Wideband RX antenna recommendation
To: ham-ant@ucsd.edu

In article <2jb9pk$h37@hp-col.col.hp.com>, <chrism@col.hp.com> writes:

>
>   I would like to have an antenna I can mount on my house that can pick up
>   signals from 25 or 50MHz on up to 905 MHz. The antenna would be a
>   receive only proposition (for scanning, etc.).
>
>   Any recommendations?

>
Check out a discone. RS sells one that is quite useable. About $60

Grover
WT6P

Date: Fri, 11 Feb 94 16:39:10 -0500
From: spool.mu.edu!howland.reston.ans.net!europa.eng.gtefsd.com!news.umbc.edu!eff!
news.kei.com!yeshua.marcam.com!charnel!olivea!news.bu.edu!noc.near.net!
news.delphi.com!usenet@munnari.oz.au
Subject: new radio communications mailing list
To: ham-ant@ucsd.edu

Yes, please, info to A. Noble, PO Box 189490, Sacramento, CA 95818.Thanks

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Date: 10 Feb 1994 19:37:09 GMT
From: ucsnews!newshub.sdsu.edu!usc!howland.reston.ans.net!sol.ctr.columbia.edu!
news.kei.com!newsstand.cit.cornell.edu!newsstand.cit.cornell.edu!
usenet@network.ucsd.edu
Subject: Quagi
To: ham-ant@ucsd.edu

In article <CKIsJH.E62@hpcvsnz.cv.hp.com> Tom Bruhns, tomb@lsid.hp.com
writes:
>(I added the "between elements" column.)
>I built one of these, and always wondered about the spacing. Is
>that spacing between the 2nd and 3rd director right?? It looks
>"funny"... Guess I could measure the gain and see if it's OK.
>From memory, Christie's posting looks like what I built, so I'm
>questioning the original article, not the posting.
>
>73, K7ITM

I've always wondered about that myself. But I've built about a dozen
quagis now on 2 meters and 440 for satellites and atv and they do match
up and do seem to work and work well, so I 've stopped worrying about it.
But it certainly does look odd compared to a yagi for a similar band set
next to it. Has anybody ever asked Overbeck where the dimensions came
from? The original articles inicated that it was sort of arrived at
empirically.

BTW, in the interest of making a reasonable sized beam on 2 once, I built
the two loops per spec and then started adding directors. SWR was bloody
awful till the second directory went on, then it was just bad. But with

the 3rd director it tamed down considerable and started looking normal. Directors beyond that didn't seem to have much effect on swr. So I tell people building them to be sure to have at least 3 directors on after the loops, after that I adjust according to gain needed and boom length available/tolerable. YMMV.

Kevin, WB2EMS

Date: Fri, 11 Feb 1994 20:35:42 GMT
From: agate!howland.reston.ans.net!math.ohio-state.edu!sdd.hp.com!col.hp.com!srgenprp!alanb@network.ucsd.edu
Subject: RG8 & PL259
To: ham-ant@ucsd.edu

HILLIER, MARK D. (md_hill@pavo.concordia.ca) wrote:

: ... By the way, RG-8 is terrible cable, I hope you are using it indoors,
: because it won't last outside.

Not necessarily. If you can find RG-8 made to the original military specs, it is very good cable indeed. (A brand name like Belden should be safe.) Unfortunately, as you say, much of the stuff masquerading these days under the name "RG-8" is junk.

AL N1AL

Date: 10 Feb 1994 15:19:41 GMT
From: ucsnews!sol.ctr.columbia.edu!xlink.net!scsing.switch.ch!swidir.switch.ch!univ-lyon1.fr!elendir@network.ucsd.edu
Subject: SWL RX Antenna
To: ham-ant@ucsd.edu

 Hello,

 one of my friend has got involved in SWL. He is on his way to buy a RX rig, but he still wavers about the antenna to use. So, what would be the best antenna for listening to almost all frequencies below 30 MHz ? I thought of a quad loop, a delta or something like a log-periodic, but the antenna has to be (as best as possible) omnidirectional ! Or directional but easily movable.
 Thanks for any advice.

 Vincent (10 weeks, and still waiting...)

--

Date: 10 Feb 94 22:56:53 GMT
From: mulvey!rich@uunet.uu.net
Subject: SWL RX Antenna
To: ham-ant@ucsd.edu

Elendir (elendir@enst.fr) wrote:
: Hello,

: one of my friend has got involved in SWL. He is on his way to buy a RX
: rig, but he still wavers about the antenna to use. So, what would be the
: best antenna for listening to almost all frequencies below 30 MHz ? I
: thought of a quad loop, a delta or something like a log-periodic, but the
: antenna has to be (as best as possible) omnidirectional ! Or directional but
: easily movable.
: Thanks for any advice.

How about a simple fan-dipole? Extremely cheap and easy to make for the major SW broadcast bands.

- Rich
--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Full power on half a watt."

End of Ham-Ant Digest V94 #30
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